

1 **CLAIMS**

2 1. A system comprising:
3 a portable integrated circuit device having stored thereon an authentication
4 application and a definition of a list of trusted applications; and
5 a computer, coupled to communicate with the portable integrated circuit
6 device, to,

7 form a secure connection between the portable integrated circuit
8 device and an application running on the computer,

9 request, via the application running on the computer, that the
10 portable integrated circuit device unlock itself,

11 receive the list of trusted applications from the portable integrated
12 circuit device, and

13 identify to the portable integrated circuit device whether the
14 application is one of the applications in the list of trusted applications.

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16 2. A system as recited in claim 1, wherein the portable integrated circuit
17 device is further to authenticate itself to the application running on the computer.

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19 3. A system as recited in claim 1, wherein the portable integrated circuit
20 device is to unlock itself only if the application is one of the applications on the
21 list of trusted applications.

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23 4. A system as recited in claim 3, wherein:
24 the portable integrated circuit device, in unlocking itself, makes private
25 information stored thereon accessible to the application; and

1 the portable integrated circuit device includes a signaling device to notify a
2 user of the portable integrated circuit device that it is safe to use the computer.

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4 5. A system as recited in claim 4, wherein the signaling device includes
5 an indicator light.

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7 6. A system as recited in claim 1, wherein the portable integrated circuit
8 device is to unlock itself only if both the application and the operating system
9 executing on the computer are each one of the applications on the list of trusted
10 applications.

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12 7. An apparatus comprising:
13 a processor; and
14 a nonvolatile memory, coupled to the processor, that stores both data and a
15 program that, when a request to access the data is received, causes the processor to
16 allow access to the data only if the requester can prove that the requester is an
17 application on a list of trusted applications maintained by the apparatus.

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19 8. An apparatus as recited in claim 7, wherein the apparatus comprises a
20 smart card.

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22 9. An apparatus as recited in claim 7, wherein the program further
23 causes the processor to:

24 send, to the requester, a challenge;
25 receive a response to the challenge from the requester;

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verify the response; and
determine whether the requester is an application on the list of trusted
applications only after the response is verified